

PATENT ABSTRACTS OF JAPAN

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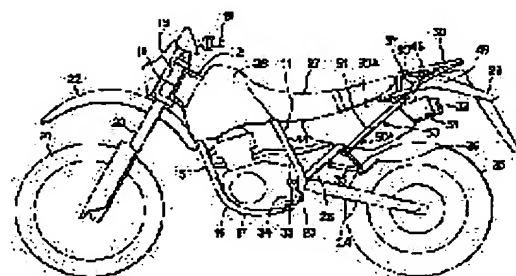
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(54) SIDE GUARD OF MOTORCYCLE

(57)Abstract:

PURPOSE: To protect car equipment parts at the time of a car upset as well as to improve the restorability at the time of the upset.

CONSTITUTION: In this motorcycle, a front wheel 21 and a rear wheel 25 are set up in the front lower part and the rear lower part of a body frame 11 respectively, and various parts are equipped in this body frame. In this constitution, a side guard 51 is set up in an upper part of the rear wheel as bulged to the outside of a car, and a front end of this side guard is clamped tight together with a pillion footrest setting stay 35 nearby the car center and clamped to a seat pillar 26, thus the rear end is attached to a spot just under a rear carrier 38 set up in the rear upper position of the car.



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CLAIMS

[Claim(s)]

[Claim 1] The side guard of the motor bicycle characterized by the front wheel and the rear wheel having been arranged at the front lower part and the back lower part of a car body frame , respectively , the side guard having bulged in the above-mentioned rear wheel upper part to the way outside the car , and having been installed in it in the motor bicycle by which the above-mentioned car body frame be equipped with various kinds of components , and having attached this side guard's front end section in car central approach , and attach the back end section in a car Gokami location , respectively .

[Claim 2] The side guard of the motor bicycle according to claim 1 with which the rear carrier has been arranged at the car backward upper bed of a motor bicycle, pilus-on foot rest has been arranged at car central approach, respectively, a side guard's front end section was attached and the back end section was attached near [a rear carrier] the above near [pilus-on foot rest] the above, respectively.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Industrial Application] This invention relates to the side guard of the motor bicycle which mainly protects the back of a motor bicycle.

[0002]

[Description of the Prior Art] Generally, in the motor bicycle, a front wheel is arranged at the front lower part of a car-body frame, the rear wheel is arranged at the back lower part, respectively, and the car-body frame is equipped with various kinds of components other than an engine, such as an air cleaner, a carburetor, and a dc-battery.

[0003]

[Problem(s) to be Solved by the Invention] However, since the motor bicycle of an off-road mold or a dual par pass mold is a car for off-road transit, there are many opportunities to reverse and it has a possibility that car equipment components may be damaged at this time.

[0004] This invention is made in consideration of an above-mentioned situation, protects car equipment components at the time of a car fall, and aims at offering the side guard of a motor bicycle who can raise the car pull-up nature at the time of the fall of a parenthesis.

[0005]

[Means for Solving the Problem] In the motor bicycle by which the front wheel and the rear wheel have been arranged by the front lower part and the back lower part of a car-body frame, respectively, and they were equipped with various kinds of components at the above-mentioned car-body frame, a side guard bulges in the above-mentioned rear wheel upper part to a way outside a car, and is installed in it, this side guard's front end section is attached in car central approach, and, as for this invention, the back end section is attached in a car Gokami location, respectively.

[0006]

[Function] Therefore, since the side guard bulged at the back of a car to the method of outside and was installed in it, while he can protect car equipment components at the time of a car fall according to the side guard of the motor bicycle concerning this invention, a rider can pull up a car easily by hanging a hand on this side guard at the time of a car fall. Such effectiveness is useful especially when motor bicycles are an off-road vehicle and a dual par pass vehicle.

[0007]

[Example] Hereafter, the example of this invention is explained based on a drawing.

[0008] drawing 1 and drawing 2 show the motor bicycle which applied a side guard's left side guard and light side guard of one example of a motor bicycle concerning this invention -- they are each a left side view and a right side view.

[0009] The car-body frame 11 of the motor bicycle shown in drawing 1 and drawing 2 is a semi double cradle frame. A head tube 13 fixes in the front end section of the frame main tube 12 of this car-body frame 11, and the body tube 14 of two right and left fixes in the back end section. Moreover, the down tube 15 fixes to a head tube 13, it extends below, and ROACHUBU 16 of two right and left is connected to the soffit section of this down tube 15. ROACHUBU 16 is prolonged to car back and fixes in the soffit section of the body tube 14. An engine 17 is carried in the space surrounded by the these frame main tube 12, the body tube 14, the down tube 15, and ROACHUBU 16.

[0010] The front fork assembly 18 is supported rotatable through a steering shaft (not shown) by the above-mentioned head tube 13 at a longitudinal direction. A handle bar 19 is attached in the upper part of this front fork assembly 18. Moreover, a front wheel 21 is supported to revolve by the soffit section of the front fork

20 of the front fork assembly 18 free [a revolution]. A sign 22 shows a front fender.

[0011] Moreover, the swing-arm pivot section 23 is installed in the lower part of the body tube 14, and a swing arm 24 is supported free [a splash] in the vertical direction at this swing-arm pivot section 23. A rear wheel 25 is supported to revolve free [a revolution] by the free edge of a swing arm 24. The buffer suspension of the swing arm 24 is carried out to the car-body frame 11 by the rear suspension unit which is not illustrated. Moreover, revolution actuation of the rear wheel 25 is carried out through the driving chain which is not illustrated by the driving force of an engine 17.

[0012] In the upper bed section of the body tube 14, the seat rail of the-two right and left which are not illustrated fixes, and this seat rail is supported by the sheet pillar 26. A sheet 27 is supported by the seat rail. The fuel tank 28 supported by the frame main tube 12 ahead of this sheet 27 is arranged. Moreover, behind a sheet 27, the rear fender 29 is arranged and frame left covering 30A and frame light covering 30B are installed under the sheet 27, respectively. A part, a dc-battery which is not illustrated of a tool holder 31 are covered by this frame left covering 30A, and a part of muffler 32 is covered by frame light covering 30B, respectively.

[0013] The rider foot rest 34 is installed in ROACHUBU 16 of the car-body frame 11 through the foot rest bracket 33. Moreover, the pilus-on foot rest mounting stay 35 of a U character configuration is installed in the sheet pillar 26, and the pilus-on foot rest 36 is attached in this pilus-on foot rest mounting stay 35. Furthermore, as the rear fender 29 is straddled in the seat rail which is not illustrated, the stand grip 37 is installed in it, and the rear carrier 38 is united with this stand grip 37.

[0014] That is, first, as shown in drawing 3 and drawing 4 , the stand grip 37 is a plane view KO typeface-like, and the stand grip boss 40 fixes it to the both ends of the stand grip tube 39 of the side view abbreviation configuration for L characters. These stand grip bosses 40 fix to the seat rail of-two right and left, respectively. Moreover, the car longitudinal-direction dimension (width of face) of the stand grip tube 39 is set as the width of face and the abbreviation same dimension of the rear fender 29, and the conventional stand grip tube 2 and a conventional said division article are used. At the time of a stand activity, such a stand grip 37 is used, in order that a rider may support the back of a car.

[0015] In the stand grip tube 39, the tool-holder bracket 41 fixes on the left-hand side of a car. The side guard mounting hole 42 and the holder mounting hole 43 are formed in this tool-holder bracket 41, and bolt immobilization of the above-mentioned tool holder 31 (drawing 1) is carried out using this holder mounting hole 43. Moreover, the side guard bracket 44 fixes in the car left-hand side of the stand grip tube 39, and the side guard mounting hole 45 is drilled in it by this side guard bracket 44.

[0016] Next, the rear carrier 38 fixes the carrier front tube 47 and the carrier inner tube 48 in the carrier main tube 46 which fixed in the stand grip tube 39 of the stand grip 37, and was prolonged to car back, and installs the carrier support tube 49 further.

[0017] The carrier main tube 46 is a plane view KO typeface-like, and is constituted by side view the configuration of L characters. This carrier main tube 46 has a car longitudinal-direction dimension (width of face) larger than the width of face of the stand grip tube 39 of the stand grip 37, and is expanded and formed outside. Thereby, the pallet area of the rear carrier 38 increases. Moreover, two or more fixing of the load credit hook 50 is carried out on the underside of this carrier main tube 46.

[0018] The front section of the carrier main tube 46 is built over the carrier front tube 47, and it is fixed. Moreover, it is built over the carrier inner tube 48 between the back end section of the carrier main tube 46, and the carrier front tube 47, and it is fixed. This carrier inner tube 48 is those with two or more, and the longitudinal direction mid gear C, and has fixed in the back end upper part of the stand grip tube 39.

[0019] The carrier support tube 49 connects the back end section of the carrier main tube 46, and the back standup section of the stand grip tube 39, and is prepared in right and left a total of two [per / every]. In the side view of the rear carrier 38 shown in drawing 4 , these carrier support tubes 49 are aslant arranged to the carrier main tube 46, and raise the reinforcement of the rear carrier 38.

[0020] Now, as are shown in drawing 1 and drawing 2 , the left side guard 51 straddles frame left covering 30A to the rear wheel 25 upper part of a car, and the light side guard 52 straddles frame light covering 30B, it is arranged so that the front section may be made to incline below, respectively.

[0021] As shown in drawing 5 and drawing 6 , the front end plate 54 and the back end plate 55 fix the left side guard 51 in the upper bed section of the left guard tube 53. The left guard tube 53 starts from the front end plate 54 and the back end plate 55, curves near both ends and extends in the level condition in drawing 6 . Furthermore, hook 50 fixes on about 54 front end plate, and U typeface hook 50A has fixed this left guard tube 53 on about 55 back end plate, respectively. Moreover, the stay mounting hole 56 is drilled by the front end plate 54, and the bracket attachment hole 57 is drilled by the back end plate 55, respectively.

[0022] As a bolt is inserted in the bracket attachment hole 57 and the side guard mounting hole 42 and it is shown in the tool-holder bracket 41 located directly under the rear carrier 38 shown in drawing 4 at drawing 1, bolt immobilization of the left side guard's 51 back end plate 55 is carried out. Moreover, with the pilus-on foot rest mounting stay 35 located in car central approach, the left side guard's 51 front end plate 54 uses a bolt for the sheet pillar 26, and is ***** (ed). In the state of mounting of this left side guard 51, since only predetermined distance separates the left side guard 51 from frame left covering 30A and he bulges to the method of the outside of a car, he protects the components covered by this frame left covering 30A and the components of the circumference of it at the time of a car fall.

[0023] On the other hand, as shown in drawing 7 and drawing 8, the front end plate 59 and the long picture-like back end plate 60 fix the light side guard 52 to the both ends of the light guard main tube 58. It is fixed and built over the light guard support tube 61 between this back end plate 60 and the light guard main tube 58. Furthermore, it is fixed and built over the light guard upper tube 62 also between this light guard support tube 61 and the light guard main tube 58.

[0024] The light guard main tube 58 starts from the back end plate 60, as shown in drawing 8 and drawing 9, and as D location shows to drawing 7, after it curves to car slanting down one, as it curves to the down one of a car before slant in E location and is shown in drawing 8, it curves in the direction of the front end plate 59, and it consists of F locations to it. Also in this light guard main tube 58, hook 50 and U typeface hook 50A have fixed.

[0025] As shown in drawing 10, the light guard support tube 61 is the L character configuration which started from the back end plate 60 and curved in G location, and fixes between E location of the light guard main tube 58, and F location. That is, this light guard support tube 61 consists of back end plates 60 the shape of a configuration and abbreviation isomorphism to E location in the light guard main tube 58. Moreover, as shown in drawing 7, the light guard upper tube 62 is the abbreviation configuration for L characters which curved in H location, and fixes, respectively near the F location of the light guard main tube 58 near the G location of the light guard support tube 61.

[0026] The stay mounting hole 56 is drilled by the front end plate 59, and the bracket attachment hole 57 is drilled by the back end plate 60, respectively. By inserting a bolt in the stay mounting hole 56, the front end plate 59 is ***** (ed) by the sheet pillar 26 with the pilus-on foot rest mounting stay 35, as shown in drawing 2. Moreover, as a bolt is inserted in the bracket attachment hole 57 and the side guard mounting hole 45 and it is shown in the side guard bracket 44 shown in drawing 4 at drawing 2, bolt immobilization of the back end plate 60 is carried out. Also in this light side guard's 52 mounting condition, the light side guard 52 separates only predetermined distance from frame light covering 30B, it bulges to a way outside a car, and the component covered by frame light covering 30B at the time of a car fall and its circumference component are protected.

[0027] According to the above-mentioned example, since the left side guard 51 bulged to the method of outside and was installed from frame left covering 30A, the components (a tool holder 31, dc-battery, etc.) covered by frame left covering 30A and the circumference component of those can be protected from the fall of a car by this left side guard 51. Moreover, since the light side guard 52 also bulged to the method of outside and was installed from frame light covering 30B, he can protect the component (muffler 32 grade) covered by frame light covering 30B and its circumference component from the fall of a car by this light side guard 52.

[0028] Moreover, since the back end plates 55 and 60 were attached in the stand grip 37 which is directly under the rear carrier 38 located in the car backward upper part and the back end section has been arranged from the front end section in the car upper part, the left side guard 51 and the light side guard 52 can raise the pull-up nature of the reverse car.

[0029] Furthermore, since hook 50 and U form hook 50A fixed also to the left side guard 51 and the light side guard 52, when loading is laid in a carrier 38, the hook degree of freedom of a rope can be raised.

[0030] Moreover, since the front end plates 54 and 59 were fixed to the sheet pillar 26 of the direct frame 11 and the back end plates 55 and 60 were fixed to the seat rail of the car-body frame 11 through the stand grip 37, the left side guard 51 and the light side guard 52 can secure enough the reinforcement of the left side guard 51 and the light side guard 52.

[0031] Moreover, the left side guard 51 and the light side guard 52 can also carry out attachment and detachment easily while the exclusive stay for mounting of the left side guard 51 and the light side guard 52 etc. becomes unnecessary and they can reduce cost, since the front end plates 54 and 59 were ***** (ed) with the pilus-on foot rest mounting stay 35 and the back end plate 55 was attached in the tool-holder bracket 41 of the stand grip 37.

[0032]

[Effect of the Invention] As mentioned above, according to the side guard of the motor bicycle concerning this invention, since the side guard bulged in the rear wheel upper part to the way outside the car, and was installed in it, this side guard's front end section was attached in car central approach and the back end section was attached in the car Gokami location, respectively, while being able to protect car equipment components at the time of a car fall, the car pull-up nature at the time of this fall can be raised by this side guard.

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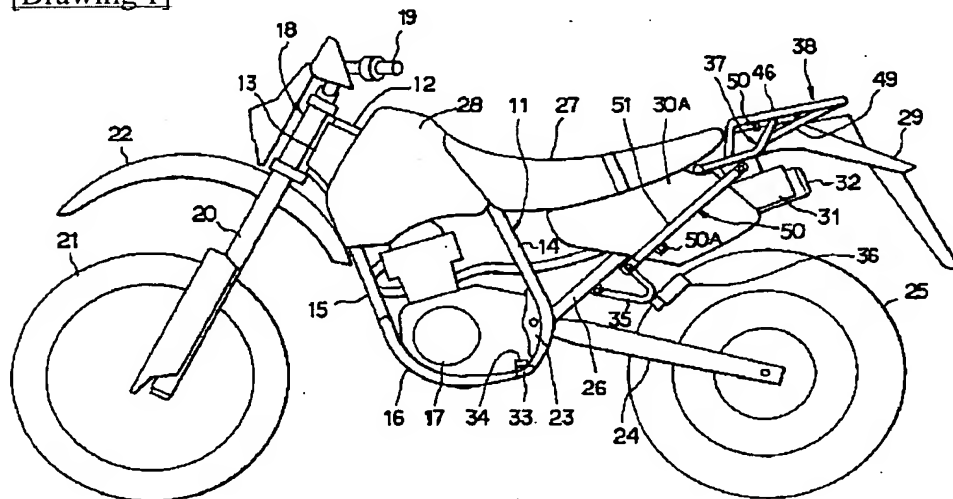
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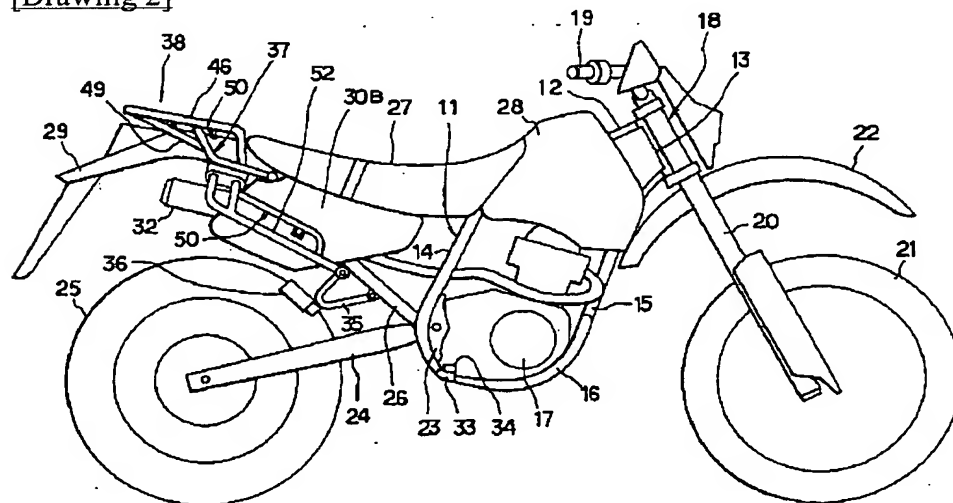
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DRAWINGS

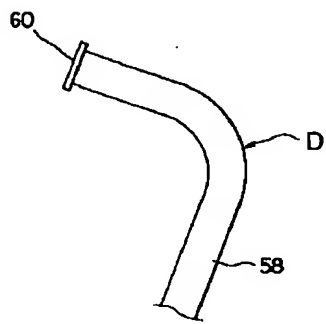
[Drawing 1]



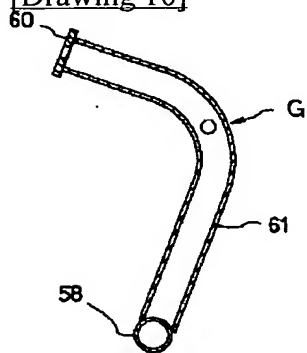
[Drawing 2]



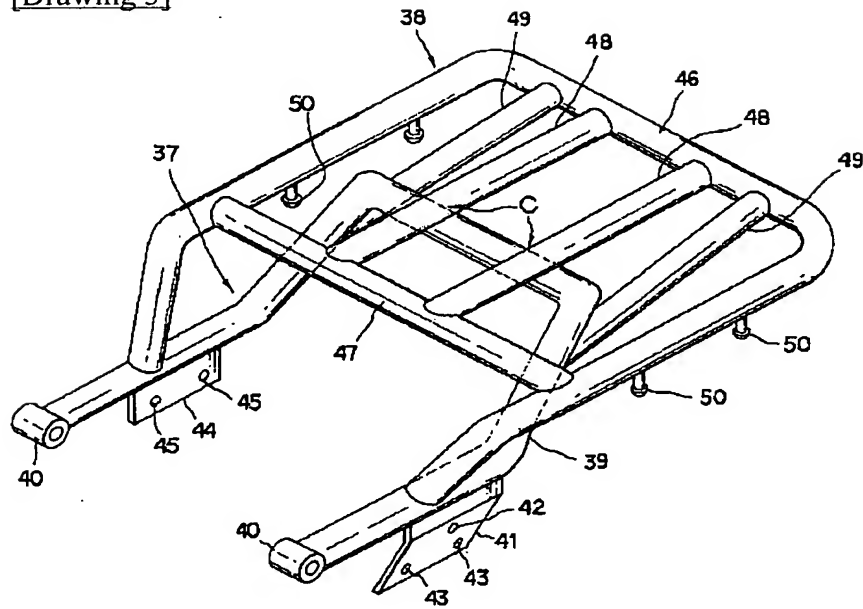
[Drawing 9]



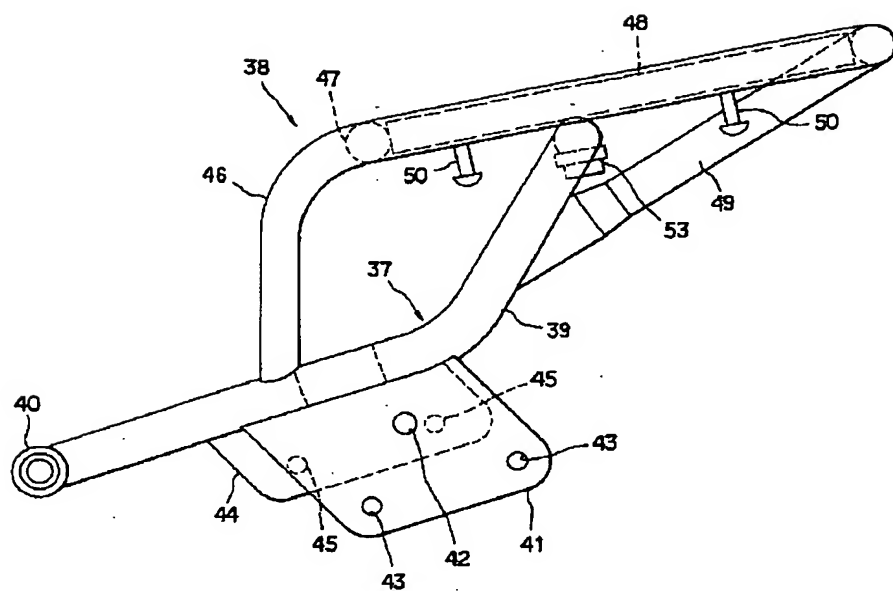
[Drawing 10]



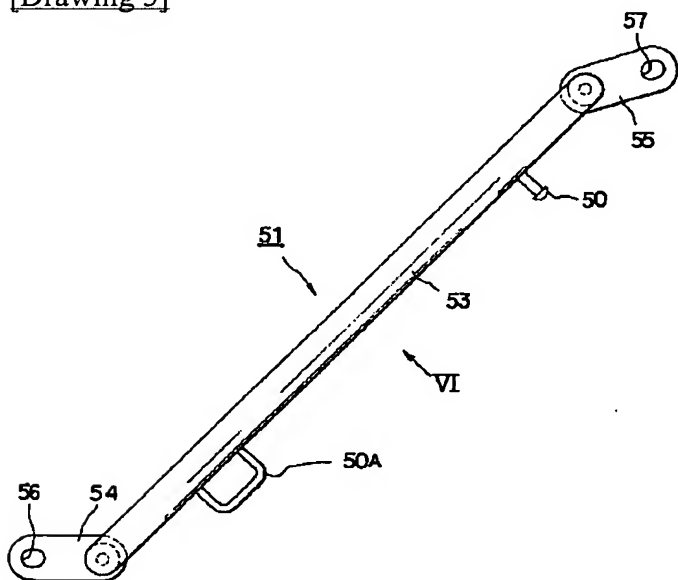
[Drawing 3]



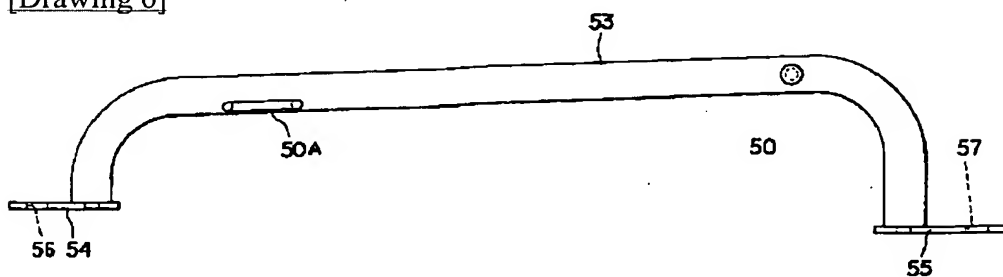
[Drawing 4]



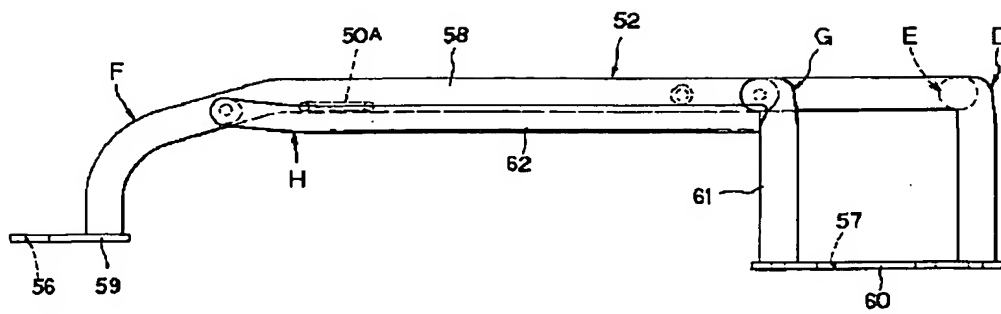
[Drawing 5]



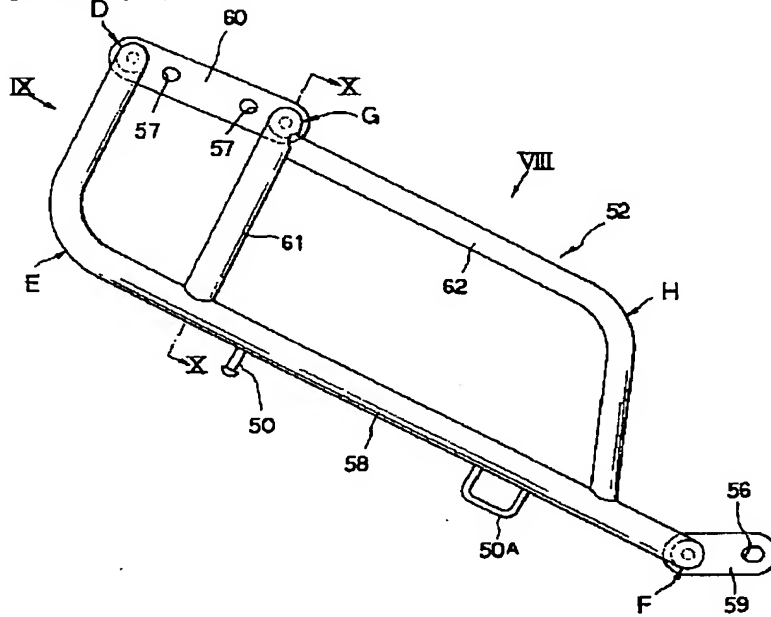
[Drawing 6]



[Drawing 8]



[Drawing 7]



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